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AIR MAIL

29th May 1956

Dear Professor Lederberg,

Thank you for your kind and most interesting letter of April 23rd. I apologise for my delay in replying to it.

There have been so many remarkable discoveries in biology in the last decade (your own being one of them) that I certainly would not exclude the possibility of transfers of somatic nuclei. One would have a situation similar in some ways to Danielli's experimental amoebae. Separate markers for cytoplasm and for nuclei would be required of course. I would not dismiss the possibility of such an experiment but it does not seem to be in sight yet.

Transfer of free chromosomes is rather more difficult to conceive but one should be prepared for anything. Technically it should be possible to put two independent chromosome markers into one nucleus (we have a potentially useful extra-long translocation chromosome in the mouse as well as the small one used in the experiment reported in "Nature"). However, if single-chromosome recombination or transfer events occur at all they may well be much too infrequent for detection by this cytological approach.

Your suggested experiment in the final paragraph of your letter is an intriguing one. Unfortunately it would require stocks of a standard inbred line with and without the chromosome marker. We are back-crossing the T6 line to CBA and hope ultimately to have an isogenic stock, but this will take some time.

I enclose a reprint of the "Nature" article.

Yours sincerely,

E. E. Ford.

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